



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Teachers in need of space

Citation for published version:

Mulholland, R, McKinlay, A & Sproule, J 2017, 'Teachers in need of space: The content and changing context of work', *Educational Review*, vol. 69, no. 2, pp. 181-200.
<https://doi.org/10.1080/00131911.2016.1184131>

Digital Object Identifier (DOI):

[10.1080/00131911.2016.1184131](https://doi.org/10.1080/00131911.2016.1184131)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Educational Review

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Teachers in Need of Space: The Content and Changing Context of Work

To further understand differential perceptions of work and well-being this paper considers the influence of gender and years in current role (YCR). We surveyed 399 secondary school teachers (Class Teachers $n=185$; Middle Managers $n=175$ and Senior Managers $n=38$) from the central belt of Scotland. Sixty-six per cent of middle managers reported work as very stressful and 63 per cent of this group reported a significant change in their well-being. No gender differences were observed within this study however aspects of the content (e.g., “workload”) and context (e.g., “changing demands”) of work presented as significant occupational hazards for class teachers and middle managers with >10 YCR. Middle managers were the only group concerned with “low staff morale” and we would suggest the *consequences* of change and a lack of time. On the basis of our findings and, in light of debates centring on teacher well-being, quality retention, high quality educational provision, we would argue that these teachers’ with >10 YCR, are in need of the physical and emotional space to reflect on and make sense of the changing context of work before they reach a point where their well-being is compromised.. This space could be created by increasing weekly non-teaching time, restructuring the school day and/or providing sabbaticals that enable teachers’ to focus exclusively on their professional learning. This would of course incur a financial cost but we would argue that this would be but a small price to pay.

Key words: Teachers, Stress, Content and Context of Work, Well-Being.

Introduction

In spite of conflicting accounts of the prevalence of ‘work stress’, pertaining to the profession of teaching, this phenomena is recognised as a worldwide concern (Kourmoussi, Darviri, Varvogli and Alexopoulos, 2015; Zurlo, Pes and Seigrist, 2010). Research has consistently demonstrated that the work of teachers bears many of the hallmarks of a very stressful occupation (e.g., Carton and Fruchart, 2014; Flock, Goldberg, Pinger, Bonus and Davidson; 2013, Kyriacou, 2001). Indeed, a range of studies have reported that around one-third of teachers routinely perceive work as a significant source of stress (e.g., Brown, Ralph and Brember, 2002; van Dick and Wagner, 2001). More recently, 50 and 60 per cent of teachers within the Irish (Kerr, Breen, Delaney, Kelly and Miller, 2011) and Scottish (Porter, 2014) context respectively have reported work as ‘very’ to ‘extremely’ stressful. However, Jarvis (2003) would argue that a consensual or general belief that the profession is stressful could be explained by social representation theory. What this might mean is that although we perceive our work as stressful at a general level, this might simply be due to a collective perception and or indeed pre-conception and not necessarily borne out by our actual lived experiences of work.

Work Stress

Although our understanding of *work stress* has evolved over the last six decades it remains an intangible entity (Cosgrove, 2000). The study reported here aligns itself with Bartholomew, Ntoumanis, Cuevos and Lonsdale’s (2014) definition of work stress as ‘an adverse reaction to excessive pressures placed upon employees in the work context’ (p. 102). What we know is that, high levels of work stress are associated with psychological distress (Chaplain, 2008) and, that teachers under stress have higher rates of absenteeism (Kourmoussi et al., 2015; Richards, 2012), experience a decline in their professional performance (Wiley, 2000) and, subsequently suffer from low self-esteem and reduced levels of motivation (Flock et al., 2013). In the long term, ongoing exposure to work stress can lead to burnout, disillusionment and in addition impact on teacher self-efficacy and pupil learning (Chan, Chen and Chong,

2010; Skaalvik and Skaalvik, 2010). Moreover, it has been suggested that teachers' stress related ill health and subsequent absences may also impact on the workload and stress of their colleagues (Bartholomew et al., 2014). Consequently the concept of work stress pertaining to the lives of teachers must remain high on our agendas if we hope to address global concerns regarding teacher attrition (Beltman, Mansfield & Price, 2011). More importantly, Gu and Day (2007) would argue that our focus should not simply centre on retaining teachers in the profession but on "quality retention" (p. 1314). This would be epitomized by teachers who can, no matter what stage they are at in their career (Mansfield, Beltman, Broadley & Weatherby-Fell, 2016), effectively sustain their commitment to teaching in the face of inherent challenges and change (Day, Edwards, Griffith & Qing, 2011). Some would argue that early career teachers (< 5 years in post) are especially vulnerable (Gallant and Riley, 2014) as they make the transition into and through the early years of teaching.

While it is indisputable that work stress can have a deleterious effect on individual teacher well-being and indeed retention and recruitment within the profession (Gold, Smith, Hopper, Herne, Tansey and Hulland, 2010) it is argued that exposure to work demands (i.e., pressures) is not the main antecedent of work stress (Griffith, Steptoe and Cropley, 1999). Furthermore, it is suggested that even when demands appear to be the same for all teachers, within a specific context, it is entirely possible that they will perceive these differently (Montgomery and Rupp, 2005). Based on the role of perception in the stress process, this study is underpinned by the transactional model of stress which recognizes individuals as active agents who respond too, influence and, are influenced by their environment (Mark and Smith, 2011; Travers and Cooper, 1996). The hallmark of this model is the belief that experiences of work related stress would be dependent on the transactions between person and environment (Lazarus and Folkman, 1984). More importantly it is argued that experiences of stress are contingent on the individual's appraisal of whether that are able to cope with work demands (McCarthy, Lambert and Reiser 2014). We therefore, recognize work stress as subjective

(Brown, Ralph & Brember, 2002) and, comprising a cognitive and emotional component (Mackay, Cousins, Kelly, Lee and McCaig, 2004).

In effect, work stress could be epitomized as the ‘physical and emotional response that occurs due to the perception of a mismatch between the conditions and requirements of the job and the abilities, resources and needs of the individual’ (Kourmoussi et al., 2015:8). In the context of the study reported here, it is suggested that aspects of work could present as potential ‘stressors’. When the individual teacher appraises themselves as ill-equipped to cope with such stressors, this would impact on them at an emotional level. Consequently, their experience of work which could manifest itself at a physical/physiological (Quick, Quick, Nelson and Hurrell, 1997) and/or psychological level (Jones and Bright, 2001). In such circumstances individual well-being could be compromised. Interestingly, research which has explored teacher stress, seems to suggest a link between organizational health and individual well-being (Hart, Wearing, Conn, Carter and Dingle, 2000, p.211) Notably, within the U.K the notion of organizational health and concerns about the emotional and physical cost of work stress (Gyllensten and Palmer, 2005) resulted in the Health and Safety Executive (HSE) developing a framework of Management Standards (2004-2009) with the specific aim of enabling organizations to tackle work related stress (Hart et al, 2000, p116). Six key aspects of work were identified as contributing to stress-related health issues if not managed well, within the workplace (Cousins, Mackay, Clarke, Kelly, Kelly and McCaig, 2004). These six dimensions of work have been conceptualized as “occupational hazards” (Palmer, Cooper and Thomas, 2004) and relate broadly to the *content* (i.e., demands, control & support) and *context* of work (i.e., relationships, role & change) (Kerr, McHugh and McCrory, 2009: 579). While this depiction of the potential occupational hazards are useful, it is argued here, that any attempt to explore teachers’ perceptions of work stress must consider the intersection between these dimensions of work and Kyriacou’s (2001) assertion that:

“... there are differences in the main sources of stress between countries, based on the precise characteristics of national educational systems, the precise circumstances of teachers and schools in those countries and the prevailing

attitudes and values regarding teachers and schools held in society as a whole” (p.30).

Occupational Hazards

Occupational hazards purported to be generic to the work of teachers include “workload”, “indiscipline”, “pupil motivation”, “time pressure”, “relationships with colleagues”, “role overload” , “role conflict” (e.g. Kyriacou, 2001; Guiglemlé and Tatrow, 1998; Nixon et al, 2011) and inadequate support from school management (Devos, Dupriez and Paquay, 2012). We could argue that these hazards simply epitomize the normal demands of teaching and in reality, these are but potential hazards, which may (or may not) be elevated to chronic inherent stressors as a consequence of our engagement with historical and indeed contemporary discourses pertaining to work stress and teacher well-being. We would argue like others, that the nature of our experiences (Carton and Fruchart, 2014) within teaching and often our gender (e.g., Chaplain, 2008; Gyllensten and Palmer, 2005) may shape our perceptions of work. However, we do concur with Jarvis’s (2003) assertion that we must consider how a ‘consensual belief’ that teaching is stressful, could influence the outcome of our research. At the same time we must acknowledge that if teachers’ perceive a continuous stream of different aspect of work as stressful on a daily basis, as opposed to a one off stressful event, this will impact more on their well-being (Larzarus & Folkman, 1984; Thoits, 2010). Previously, within the UK, Travers and Cooper (1996) cited “classroom discipline” as a significant source of stress for teachers but cautioned that causes of stress will vary from one teacher to another. While Griffith et al., (1999) study which comprised over 700 Primary and Secondary Schools within South London, identified “work pressures” and “student misbehaviour” as the main sources of stress for teachers they also highlighted the role of coping in our perception of work stress. Fifteen years later, an extensive survey conducted by Teacher Assurance (2013) highlighted similar ‘stressors’ to those previously identified by Travers and Cooper in 1996 (e.g., “low social statuses” ; “lack of parental support” ; “work overload” and “poor status”).

Within the Scottish context, a familiar picture has unfolded over time (e.g., Wilson, 2002; Porter, 2014). When Munn, Johnstone and Sharp (2004) compared teachers' perceptions of "indiscipline" across three time frames (1992, 1996 & 2004) it was noted that, within the secondary school context, more teachers had experienced a greater number and range of potentially disruptive "behaviours" (p. 65), not just within their own classrooms but, also around their schools in general. It has been suggested that disruptive behavior can be highly stressful, especially for female teachers in general (Chaplain, 2008) and, because it challenges teachers' sense of control and efficacy (Boyle, Baglioni, Flaioni and Brown, 1995). We know that the demands of "workload" in particular of "change" (e.g., Johnstone and Munn, 1993) have long been and indeed continue to be of concern to teachers within the Scottish context (Porter, 2014). Currently, a study conducted by Porter (*n* = 6,987) for the Education Institute Scotland (EIS) highlights aspects of the content and context of work as sources of stress within the Scottish context: "workload", "excessive paperwork", "issues with management / leadership" and "number and speed of changes". In addition to intrinsic stressors (Jarvis, 2003) such as "workload" organisational factors (e.g. "political/educational climate") and systemic factors (e.g. "constant change), are also believed to impact on levels of work stress in teaching (e.g., Chaplain, 2008; Hart et al., 2000; Jennings and Kennedy, 1996).

Change

While change in education brings with it many opportunities and challenges it can also precipitate a sense of insecurity (Fullan, 2002; Zach and Inglis, 2013). This is especially important within the context of the study reported here, as Pickard (2003) would argue that since the industrial disputes of the 1980s, which were fueled by teachers' concerns about pay, conditions and indeed professional status, change has been a constant in Scottish education. Lennon (2003) further suggests that 'since 1996 secondary schools in Scotland have had to deal with change on an unprecedented scale' (p.418). In the early 1990s policies such as 'Curriculum and Assessment- a Policy for the 90s' (Scottish Education Department , 1987) heralded the beginning of far reaching changes in the nature and delivery of a 'common'

curriculum within Scottish Schools (Swann and Brown, 1997). Against this backdrop of change the reestablishment of the Scottish Parliament in 1999 resulted in the Scottish Government and the Minister for Education having devolved responsibility for educational policy (O'Brien and Christie, 2008). Subsequently, national priorities for education (e.g. achievement and attainment; inclusion and equality; learning for life: Humes, 2003, pp77-8) were approved by the Scottish Parliament. The implementation of subsequent policies pertaining to e.g., inclusion and equality (Standards in Scotland's Schools Act, Scottish Government, 2000) saw an increase in the number of pupils with additional support needs being included in mainstream schools. Teachers were charged with introducing and developing new curricular and pedagogical practices, raising attainment in addition to providing on campus support for the young people who were at risk of exclusion and pupils with additional support needs. Raising attainment while meeting the national priority of providing an inclusive /equitable education would certainly hold challenges for local education authorities, schools and teachers. In addition, Scottish teachers entered into a phase of radical restructuring of the profession when an agreement over teachers' terms and conditions culminated in the publication of *A Teaching Profession for the 21st Century* (Scottish Executive, 2001) which outlined the conditions and expectations considered integral to ensuring a revitalized and re-energized profession. This report was believed to have initiated the development of the radical and ambitious 'curriculum for excellence' (CfE) within Scotland. (Donaldson, 2011). It also worth noting that the importance of all teachers having access to quality continued professional development was also raised at this time. In addition, the promotion of high quality education was seen as contingent on the quality of the teaching profession and of its leadership, key points reiterated ten years on by Donaldson's (2011) review of teacher education in Scotland. While the study we report here took place prior to the imminent enactment of the CfE, participants would have been immersed in the many debates that surrounded this initiative. A recent evaluation of the early impact of Teaching Scotland's Future (Ipsos Mori Scotland, 2016) reports a significant shift in the culture of career long professional learning (CLPL) but does confirm that the further

development of professional networks and increased access to quality resources could enhance professional learning. It is suggested that a lack of supply teachers in general and the actual number of national priorities that schools and teachers are currently engaging with, is impacting on how they engage with CCPL.

While others have suggested that change within education in Scotland has been less radical and, at a slower pace than in England (Hulme, Buamfield, Livingstone and Menter, 2009), we recognize that change can also affect how teachers *feel* about their work (Day and Kington, 2008). In such times of change, individuals will respond differently (Hargreaves, 2005) and how they cope with the challenges of change will play a key role in their perceptions of work in general and indeed, their responses to potential occupational hazards (Griffith et al, 1999). We know that our response to change can be shaped by age, what stage of our career we have reached (Hargreaves, 2005) and Kyriacou (2001) would argue our precise circumstances. For example, within the Scottish context (2000) Hall et al., concluded that 79 per cent ($n=3,000$), of teachers with >15 years of teaching experience (YTE), reported a perceived (but not actual) increase in workload as a consequence of recent changes. Four years on from this study Dunlop & MacDonald (2004) reported that 44 per cent of teachers within the Scottish context, rated teaching as ‘very’ to ‘extremely’ stressful’ while 90 per cent reported an increase in work related stress over the last five years (1998-2003). A significant association was also observed between YTE and the belief that there was a link between work stress and general health.

While it could be argued that the Scottish education system is rather unique in that it ‘has always had its own separate and distinctive education system within the United Kingdom’ (O’Brien and Christie, 2008. p. 147), the literature would suggest that these teachers’ experiences of work related stress and indeed educational change, may not be so different from that of their colleagues south of the border (e.g., Teacher Assurance, 2013) or in developed countries across the world (e.g., Chan et al., 2010; Ferguson et al., 2012). However, to add further context, it is important to note that the study reported here was

concluded six years after Dunlop & MacDonald's (2004) study. At this point schools and teachers across Scotland were grappling with the imminent introduction of a new 3-18 curriculum, namely the curriculum for excellence (CfE) heralded as a 'landmark development in Scottish education' (Priestley and Humes, 2010: 365). Notably, the vision for the CfE, placed teachers centre stage as developers of curriculum and as agents of change (Priestley, Biesta and Robinson, 2014).

The Present Research

Previously we identified significant differences in perceptions of work in relation to the teaching 'role' held by participants within the secondary school context. We concluded that these differences could be explained by the degree of quantitative and qualitative overload experienced by middle managers as they balanced teaching and management responsibilities (Author et al., 2013). To further understand these findings and, with a view to adding to the existing literature, we now consider the extent to which 'gender' and 'experience' may further explain these differences. However, rather than simply look at experience in terms of years of teaching experience (Dunlop and MacDonald, 2004), we are specifically interested in how long teachers had been in their current role (YCR) at the time of this study. While we did not formally utilise the HSE Management Standards Tool (Kerr et al., 2009; Palmer et al., 2004) this framework enabled us bring teachers' 'insider' views of their precise circumstances within this Scottish context, to the forefront. The following research questions are addressed within this paper:

Research Question 1: To what extent (if at all) do secondary school teachers who hold different teaching roles generally perceive work as stressful?

Research Question 2: To what extent can perceptions of subjective well-being, reported by teachers who hold different roles, be explained by gender and years in current role?

Research Question 3: How can we best understand participants' perceptions of work and well-being?

Procedure

Prior to conducting the study ethical approval was secured from the School of Education's ethics committee, and all participants completed informed consent forms, which assured anonymity. Survey-questionnaires were issued to all participating schools and collected one week later by the researcher at a prearranged time.

Participants

A representative sample of urban, suburban, and rural secondary schools ($n = 18$) in Scotland volunteered to participate in this study, and from these schools, 399 teachers (243 females, 156 males) aged 23-63 (Mean 44 years, 73 per cent ($n=293$) aged >40) responded to a survey questionnaire (response rate 68 per cent). The sample population was representative of the age/gender profile of Scottish teachers and schools within the secondary context (e.g., Wilson, 2002). The sample comprised 399 secondary school teachers (243 females and 156 males) from the central belt of Scotland (Class Teachers $n=185$; Middle Managers $n=175$ and Senior Managers $n=38$). A greater proportion of class teachers (67 per cent) were female however a gender balance was evident within the middle and senior manager groups (See Table 1). Twenty-three ($n=42$) and 51 per cent ($n=94$) of class teachers had <5 YTE and >15 YTE. Around 81 and 90 per cent of middle managers ($n=142$) and senior managers ($n=34$) respectively had been teaching for >15 years. Forty-six and 66 per cent of class teachers ($n=85$) and senior managers ($n=25$) had been in their current role between one to five years. While 29 and 47 per cent of middle managers had been in their current role from one to five years ($n=51$) and >10 years ($n=82$) respectively.

Insert Table 1. Frequency Distribution (f/%) within groups formed by 'teaching role' according to gender, years of teaching experience (YTE) and years in current role (YCR).

The Survey Questionnaire

At the outset we were keen to establish not simply how teachers in general perceived their work but if there were any differences apparent across the different teaching role. Therefore a single question invited participants to rate the extent to which they perceived their work as ‘stressful’ (GPW) (0 = not at all stressful, 1 = slightly stressful; 2= quite stressful, 3= very stressful) (RQ1). The Stressors in Teaching Scale (SITS) (Author, 2009) was included to highlight which dimensions of work present as occupational hazards and to explore if teaching role, gender and /or YCR influenced perceptions of teachers’ daily work life (RQ3). Participants rated the extent to which each of the 64 SITS-items such as ‘assessment and marking’, ‘ ‘professionalism not respected’; ‘indiscipline’ and ‘physical school conditions’ stressed them on a daily basis (0=not at all, 1 = slightly , 2 = quite a lot, 3= very much so) . An opportunity was provided for participants to identify any other aspects of work they deemed as stressful. However, no such items were identified at this point. Previously, a factor analysis with oblimin rotation had identified four dimensions of the SITS: Factor 1—Workload e.g., “too little time”), Factor 2—Professional Ethos (e.g., “views and opinions not respected”), Factor 3—Teaching- Learning Interface (e.g., “pupil motivation”), and Factor 4 Perceived Support (e.g., “poor course resources” (Author, 2011).

To firstly, establish the *concurrent/predictive validity* (Tolmie, Muijis and McAteer, 2011) of the general measure of work stress (GPWS) and SITS and to secondly explore the intersection between teaching role, gender, years in current role and, perceptions of subjective well-being (RQ2) this study also included the General Health Questionnaire (GHQ-30) (Goldberg, 1972). The GHQ-30, a validated measure of psychological well-being which encapsulates manifestations of “stress” invites participants to reflect on their subjective well-being (Millings-Monk, 2004) and indicate the extent to which 30 items (e.g., ‘found everything getting on top of me’ and ‘having recurring thoughts’) caused them problems in recent weeks (0- *not at all*, 1 – *‘no more’ than usual* 2 – *‘rather more’ than usual* and 3- *‘very much more’ than usual*). For validation purposes total GHQ-30 and SITS scores were computed for each participant (likert methods of scoring.) Subsequently, Pearson’s product-moment coefficient

identified modest positive relationships between GWPS/GHQ-30 ($r = .38$) and SITS/GHQ-30 ($r = .58$) indicating an acceptable level of concurrent validity. Coefficients of determination were calculated and highlighted that the GPWS and SITS respectively explained 14 and 34 per cent of variance in GHQ-30 responses. Reliability of GWPS, SITS and the GHQ-30 was established by inviting a representative proportion of participants to take part in a 1-week test–retest ($n = 40$; 10%). Pearson’s product–moment correlations were then calculated and confirmed that measures of work stress (GWPS, $r = .70$; SITS, $r = .79$) and well-being (GHQ-30, $r = .64$) displayed appropriate levels of reliability. In addition, a preliminary check of scale reliability served to confirm the internal consistency of SITS ($\alpha = .94$). While, there is some debate about what alpha value is acceptable to indicate the reliability of a scale it is acknowledged that an alpha value above .7 (Field, 2005) generally suggests that the scale in question is measuring the same underlying construct which in this case is “work stress”. Finally, to compare perceptions of subjective well-being across teaching role groups to what would be expected in a general population (reference, date) and, in relation to gender and YCR we adopted the binominal method (case) of scoring GHQ-30 responses (0-0-1-1) to compute a mean score for participants.

RESULTS

Perceptions of Work and Well Being

Based on the nature of the data set, frequency/percentages were computed to ascertain the extent to which work was generally perceived as stressful (SPSS v21). With a mode of 3 on a four point scale (0-3) measures of GPW were skewed (-1.505) with 57 per cent of participants reporting work as ‘very’ stressful. A chi goodness-of-fit test was utilized to explore GPW responses across the groups formed by ‘teaching role’ (RQ1) and significant differences were observed ($\chi^2 (3) = 27.054, p \leq .008$). We explored these findings further by computing adjusted standardized residual (ASR) scores ($X^2 = \text{Sum } (O-E)/E^2$). An ASR score can be positive or negative and an absolute value of 2 or more indicates significant differences from the expected score (Tolmie et al, 2011). We noted that a significantly smaller proportion of

teachers than expected (ASR= -4.8) generally perceived work as ‘not at all’ stressful, while a significantly higher proportion rated work as ‘very’ stressful (ASR=2.5). In effect, 47 and 51 per cent of senior managers (n -18) and class teachers (n -94) respectively reported work as ‘very’ stressful while 66 per cent of middle managers (n -116) fell into this category

Insert Figure 1 Proportion (%) of teachers according to current teaching role who generally perceive ‘work’ as ‘not at all/slightly ‘ (0/1) to ‘very’ (3) stressful.

The binominal method of scoring (0-0-1-1) the GHQ-30 was utilised to explore perceptions of subjective well-being (e.g., participant was “not at all” (0) or “no more” (0) under strain than usual, participant was “rather more” (1) or “much more” (1) under strain than usual). The group recorded a GHQ-30 mean of 9.8 (SD 8.2) (Range 5.8 (SD 5.7) - 11.3 (SD 8.5); (Skewness -.506 Kurtosis .370). A series of one way ANOVA tests highlighted significant differences in GHQ-30 mean scores across the groups formed by teaching role $F(2,399) = 5.988, p = .003$. Post hoc comparisons (Tukey HSD test) indicated that middle managers ($p = .05$) with a mean of 12.1 (SD 8.5) recorded significantly higher GHQ-30 scores than class teachers (M8.3 SD 7.7) ($p = .009$) and senior managers (M6.2 SD 7.6) ($p = .037$). Significant differences in GHQ-30 scores were also apparent in relation to YCR $F(4,399) = 3.436, p = .01$ but not in relation gender ($p = .989$). Notably, the highest GHQ30 scores within each group, were reported by class teachers (M10.0 SD3.8) and middle managers with >10YCR (M15.4 SD 9.4) and senior managers with <5YCR (M7.0 SD4.5) (See Figure 2).

Insert Figure 2. Mean GHQ-30 ‘case’ scores recorded by each group of teachers according to years in current role (YCR)

A GHQ-30 score of 5 and above is generally used as a cut off score indicative of ‘caseness’ (Millings-Monk, 2004) i.e., levels of psychological morbidity within a general population normally warranting therapeutic intervention (Moffat, McConahcie, Ross and Morrison, 2004). We know that it is usual for 30 per cent of any general population to record a ‘case’ score (Ho, 1996). Figure 2 in some ways highlights why we should take account of debates concerning the robustness of this cut off score in that all our groups score above 5. In light of this and, to compare our groups of teachers with a general population, we also calculated the

proportion of class teachers, middle and senior managers recording GHQ-30 scores of 10> and 20> within the groups formed by YCR. Within each of the teaching role groups the proportion of participants recording GHQ-30 scores of 10> was highest in those who had >10 YCR. While 14 and 16 per cent of senior managers ($n = 20$) and class teachers ($n = 13$) with >10 YCR recorded GHQ-30 scores in excess of 10, 63 per cent of middle managers ($n = 54$) fell into this category. Of concern is the fact that 15 and 29 per cent of class teachers ($n = 28$) and middle managers ($n = 24$) respectively with >10 YCR recorded well-being scores in excess of 20. The main issues reported by those teachers scoring >20 (>10 YCR) were 'feeling much more tired than normal'; 'feeling under constant strain' and 'finding everything getting on top of me'.

Perceptions of Occupational Hazards

In an attempt to understand participants perceptions of work and well-being (RQ3) we split the data file according to teaching role and then computed SITS factors scores (F1: WL; F2: PE; F3: TLI and F4: PS) for each of the groups formed by gender and YCR. A preliminary viewing of these results clearly highlights that senior managers as a group and, class teachers with <5 YCR, recorded lower SITS Factor scores than their colleagues in every instance (See Table 2). To explore this further we conducted a series of multivariate analysis of variance (MANOVA). This was appropriate as SITS Factors were four continuous measures derived from a single scale (SITS). As is customary for this type of analysis preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers (Karatzias, Power, Flemming and Lennan, 2002). No serious violations other than the fact that significant K-S scores raised some concerns about meeting the assumptions of normality. However, it could be argued that these findings are not that unusual within a relatively large sample ($n = 399$) who are reporting on a subjective construct such as work stress. In such instances, the differences between the actual and trimmed mean scores can be considered a better indicator of normality (Field, 2005). As the difference in mean and trimmed mean factor scores ranged from 0.07 to 1.24 across SITS factors, it was safe to assume an

acceptable level of normality and proceed with the next stage of the analysis. Statistically significant differences were observed on the combined SITS variable between groups formed by YCR $F(4,399) = 4.001, p = .001$, Wilk's Lambda .85, partial eta squared = .04), but not in relation to gender ($p = .267$). YCR (eta = .09) had the greatest influence on perception of F1: Workload (e.g., 'too little time').

Insert Table 2: Mean (SD) SITS Factors scores for teachers holding different roles according to years in current role (YCR)

Post hoc comparisons using Tukey HSD test identified that participants who had been in post for <5 years perceived all dimensions of work as significantly less stressful than their colleagues ($p \leq .001$). In relation to the intersection between teaching role and YCR (see Table 2) middle managers with >10YCR recorded the highest mean scores for SITS F1: Workload (e.g., 'inclusive education') (M44.1 SD 10.7), F2-Professional Ethos (e.g., 'low staff morale') (M22.2 SD 10.4) and F3-Teaching Learning Interface (e.g., 'indiscipline') (M27.5 SD 6.5). While class teachers with >10YCR recorded the highest mean score for F4: Perceived Support (e.g., 'lack of support from SMT' (M27.29.4). To understand these findings further we placed the aspects of work identified by class teachers ($n=55$), middle managers ($n= 82$) and senior managers ($n= 7$) with >10YCR, as stressful on a daily basis, alongside the HSE Management Standards (Kerr et al., 2009). Table 3 highlights that senior managers perceive far fewer aspect of work (3 aspects) as 'occupational hazards' than class teachers (11aspects) and middle managers (19 aspects). If we consider firstly, the *content* of work (Kerr et al., 2009) we can see differences in the precise circumstances of these groups of teachers (see Table 3). In particular the daily demands of work (e.g., "inclusive education") and the extent to which they feel supported (e.g., "not enough time for development work") in their work appears significantly different for middle managers. Interestingly the *context* of work for senior managers is markedly different in that they has no teaching commitments and that relationships at work and change were not a stressful feature of their daily work. While there is a level of similarity to which aspects of the content and context of work present as occupational hazards for class teachers and middle managers it is only the latter group that

cite the following as stressful on a daily basis: ‘low staff morale’, ‘curriculum change’, ‘deadlines’, ‘overload of new ideas’, ‘not enough time for development work’, ‘balancing additional responsibilities with teaching’, ‘too much time spent working at home’ and ‘ineffectiveness due to time constraints’.

DISCUSSION

Perceptions of Work and Well-Being

With a view to further understanding significant differences in perception of work and well-being (Author et al., 2013) the research reported here considered the influence of gender and YCR. Initial findings appear to confirm that ‘teaching’ has the hallmarks of a stressful occupation (Carton and Fruchart, 2014; Kyriacou, 2001) with around 50 per cent of class teacher and senior managers reporting work as *very* stressful. These figures are well above the one-third of teachers reporting work as ‘very/extremely’ stressful in a range of studies (e.g., Brown et al., 2002; van Dick and Wagner, 2001) and higher than reported by Dunlop and Macdonald within the Scottish context in 2004 (44 per cent = ‘very’ to ‘extremely’ stressful). Moreover, the proportion of middle managers (66 per cent) indicating work as *very* stressful was higher than reported more recently within the Irish (50 % - Kerr et al, 2011) and Scottish (60% - Porter, 2014) context respectively. We could argue that these comparison are not sound as our scale did not give ‘extremely’ as an option, nonetheless these figures are based on our participants selecting the highest level of ‘stress’ available on our scale (0-3 ; 3 = ‘very’ stressful).

Interestingly, and in opposition to research in the field (e.g., Chaplain, 2008; Gyllestan and Palmer, 2004) we observed no significant gender differences at any point in the study however, significant differences were apparent in relation to YCR. In contrast to Dunlop and MacDonald’s (2004) study which explored teacher well-being within the Scottish context, some of our senior managers (<5YCR) reported their well-being as compromised this steadily decline with senior managers (>10YCR) scoring below the threshold indicative of caseness

(Millings-Monk, 2004). However, it is concerning that between 15 and 29 per cent of class teachers and middle managers with >10YCR reported a worrying decline in their normal levels of well-being (GHQ-30: >20), at the time of this study. These levels of compromised well-being would be of real concern within any general population (Ho, 1996; Moffat et al., 2004) and indicate that for some of our teachers at least 20 of the GHQ-30 items (e.g., ‘feeling less able to concentrate’) were an issue. While we did not directly ask teachers if they felt there was a link between work stress and health (Dunlop and MacDonald, 2004) we observed a positive inverse relationship between perceptions of work (GPW/SITS) and well-being (GHQ-30). In addition, we noted that SITS, which encapsulates potential occupational hazards within this context, explained 34 per cent of the variance in well-being scores (GHQ-30). We have no intention here to claim a causal link and must acknowledge that these findings could be reflective of an adverse reaction to “stressors” (Bartholomew et al., 2014) that are not work-related or indeed an outcome of teachers’ efforts to manage their work-life balance (Author et al., 2013). Alternatively, the timing of our study which coincided with one of the ‘main’ stress points in the secondary school year (April – May 2010) as well as the imminent enactment of the ground breaking curriculum for excellence (Hulme et al., 2009) may have influenced perceptions of work and well-being.

Findings may also be simply reflective of the range of discourses around teacher stress which could lead to a consensual belief that teaching is stressful (Jarvis, 2003). However, we would suggest that while there is a general consensus that work is stressful across the group as a whole, teaching role and more specifically years in current role appeared to be an antecedent of participants perceiving their work as stressful and indeed a decline in ‘subjective well-being’, for some of our class teachers but in particular middle managers with >10YCR. We would argue that these findings add further weight to growing concerns about *quality retention* (Beltman et al, 2011; Gold et al., 2010; Gu et al., 2007) *along with* the immediate and long term impact of work stress within the teaching profession (e.g., Bartholomew et al., 2014; Chan et al., 2010, Kerr et al., and Porter, 2014). However, we are aware of the

limitations associated with utilizing self-report measures exclusively to explore work stress (Kyriacou, 2001, Gugliemi & Tartov, 1998). We have tried, within this study, to address this by firstly, ensuring we used a measure of work stress that was initially developed on the basis of not our, but teachers phenomenological accounts of daily stressors within the Scottish context (Author et al., 2009). Secondly, our well-being measure invited participants to reflect on changes in their normal levels of well-being rather than us defining ‘normal’ for them.

Perceptions of Occupational Hazards

We were keen to understand why between 47 and 66 per cent of these groups of teachers considered their work to be ‘very’ stressful’ and, were intrigued by the fact that some of our class teachers and middle managers with >10YCR, had reported a significant decline in their normal levels of well-being. When we explored perceptions of work we observed distinct differences in the precise circumstances of our groups of teachers with >10YCR. Interestingly participants who had been in the profession for the least amount of time (<5 years) appeared to be less vulnerable (Gallant and Riley, 2014) in that they perceived all aspects of work as significantly less stressful. We noted that the occupational hazards identified by senior managers related exclusively to the *content* of work (e.g., ‘workload’, ‘too little time’, and ‘too much paperwork’) and, that some similarities in how class teachers and middle managers perceived the *content* of work were evident. For example, both groups cited demands such as “workload”, “inclusive education”, “too little time”, “indiscipline”; “too much paperwork”; “low-level indiscipline”; and “pupil motivation”, as stressful on a daily basis (see Table 3). To some extent these findings resonate with a range of national and international studies (e.g., Cosgrove, 2000; Ferguson et al., 2012, Griffith et al, 1999; Guigleml and Tatrow, 1998; Hall at al., 2000, Nixon et al, 2011, Porter, 2014; Teacher Assurance, 2013). The content of work is epitomized by a fine balancing act between the demands of work (e.g., “workload” and “indiscipline”) which is played out in schools across the world on a daily basis. However, Griffith et al (1999) would argue that exposure to these intrinsic demands of teaching alone, is not necessarily an antecedent of stress. We would suggest that it was not simply exposure that

was an issue here, but teachers' subjective perceptions of (Brown et al., 2002, Montgomery and Rupp, 2005) and transactions with their working environment (Mark and Smith, 2011; Travers and Cooper, 1996). We acknowledge the cumulative impact that a continuous stream of daily stressors such as these could have over time (Lazarus and Folkman, 1984; Admiraal et al., 2000). Furthermore, we suggest that this range of occupational hazards associated with the very 'content' of work *alone*, could have a negative impact on teacher motivation (Flock et al., 2013; Brown et al., 2002) and well-being (Dunlop & MacDonald, 2004; Gold et al., 2010). Overtime these experiences of work could conceivably lead to burnout, disillusionment and impact negatively on pupil learning (Chan et al., 2010; Skaalvik and Skaalvik, 2010) and teachers' professional performance (Wiley, 2000). However, this is only part of the story and it would be remiss of us to simply focus on the quantity or indeed cumulative nature (Thoits, 2010, Admiraal et al., 2000) of these daily occupational hazards. We must consider the extent to which the fluid interactions between these teachers, the content *and* the context of their work may have influenced their perceptions of work and well-being. It was interesting to note that, within the context of this study, senior managers with >10YCR did not cite any aspect of the *context* of their work as stressful nor did they report a significant decline in their normal levels of well-being. We could argue here that these specific findings may be reflective of the small number of senior managers and/or the fact that SITS did not truly capture the lived experiences of senior managers (Author et al., 2013). It may also be that this is due to the fact that even although almost 90 per cent of senior managers had >15 years of teaching experience 66 per cent had only been in their current role for <5 years (See Table 1).

Insert Table 3. Class Teachers, Middle Managers and Senior Managers with >10 YCR Perceptions' of Occupational Hazards Compared to the HSE Management Standards.

The Changing Context of Work

We now specifically turn our attention to class teachers and middle managers with >10YCR. For class teachers (85 per cent *) and middle managers (75 per cent *) with >10YCR, the *context* of work was firstly defined by the weekly teaching* allocation that came with their *role*. In addition the majority of these teachers had >15 YTE and, as this study was completed in 2010, therefore had borne witness to the unprecedented changes which had been part of Scottish education since 1996 (Lennon, 2003). When we firstly consider their perceptions of *relationships* at work, it was clear that a number of common factors would have certainly impacted on the relationship between both groups of teachers and their pupils (e.g., “pupil motivation”, “pupil manners” and underachieving pupils”). Notably, for middle managers “low staff morale” was a daily source of stress and potentially could have impacted on the extent to which positive working practices could be promoted (Kerr et al., 2009) as could issues pertaining to the management of pupils’ behavior (e.g., “low level indiscipline”) and threats to their authority (e.g., “erosion of teachers’ authority”). It is argued that a perceived erosion of teachers’ authority coupled with the challenges of minimizing pupil disruption while maximizing learning and providing an inclusive environment (Hulmes, 2003) within the work context, could influence the extent to which these teachers, who had >10YCR felt they had *control* over how they do their work (Boyle et al., 1995; Kerr et al., 2000). If we add this scenario to the feelings of accountability which must be inextricably linked to the stress associated with ‘pupil motivation’ and ‘achievement’, we perhaps gain a degree of insight into why the 66 and 51 per cent of middle managers and class teachers respectively report their work as very stressful. As these teachers are investing their efforts to meet the usual demands of work they are also managing *relationships* with pupils, which appear to be challenging. Building on the notion of *support* (Kerr et al., 2009) a lack of time in general is perceived as a significant source of stress. If we consider time as a resource, it would appear that physical support within the work context may also be an issue for both groups. However, it is middle managers only who are concerned about the amount of “time

they spend working at home”, “the challenges of “balancing teaching with their additional responsibilities” and “low staff morale” as a daily source of stress (See Table 3). We know that teacher absence and ill health can impact negatively on their colleagues (Bartholomew et al., 2014) but we would argue here that low staff morale could also impact negatively on those teachers who are present. Bearing this in mind and, when we add systemic stressors such as change (Jarvis, 2003) to the equation, we begin to see some additional and significant differences in the precise circumstances of these two groups of teachers.

Both groups cite “changing demands” as stressful however, middle managers also perceive ‘curriculum changes’ and ‘overload of new ideas’ as stressful on a daily basis. Notably, they also raise concerns about not “having enough time for development work” and how ‘ineffective time constraints makes them feel’. We would suggest that in the case of these middle managers, findings clearly draw our attention to the *consequences* of change and a perceived lack of time. In effect, this key difference in the precise circumstances of our groups of teacher may illuminate why 66 per cent of this group report teaching as very stressful and, why almost one third report a worrying decline in their normal levels of well-being (GHQ-30 >20). We have no means of gauging how ‘change’ has been managed and communicated (Kerr et al., 2009) within the context/s of this study or indeed verifying this ‘lack of time’ but findings may suggest that middle managers in particular, who have been in their current role for >10 years, are feeling the impact of ‘change’ (Zach and Inglis, 2013). We would argue that it may not be change itself that is the issue but how the challenges of change and, a perceived lack of time has impacted on and indeed shaped middle managers with >10YCR, daily transactions with work (Jennings and Kennedy, 1996; Hart et al., 2010) and, moreover how they *feel* about their work.

Against this backdrop we also know that middle managers are charged with being and supporting other as they become ‘agents of change’ and ‘curriculum developers’ (Priestley et al., 2014) and, that they are central to the enactment of the ground breaking curriculum for excellence (Priestley and Humes, 2010). Previously we have argued that it was the nuances

and demands of the role of middle management that explained significant difference in perceptions of work stress and well-being (Author, et al., 2013). However, at this juncture we would argue that years in current role clearly played a role in how class teachers and middle managers specifically, perceived work. If we also contemplate the significant decline in normal levels of well-being reported by middle managers >10YCR and, the physical (e.g., “tiredness”) and emotional (e.g., “under constant strain”; “everything getting on top of me”) manifestations often associated with work stress (Quick et al., 1997; Jones and Bright, 2001) we would suggest that these teachers may be feeling the strain of work (Wilson, 2002) or having an adverse reaction to work (Bartholomew et al., 2014). Of course, we fully acknowledge at this point, that adding a qualitative dimension to this study, would have helped us to test this assumption out by fully explore how teachers actually feel. What we do know however, is that they are *feeling* the consequences of change and a perceived lack of time.

Conclusions

Within the context of this study around 50 per cent of class teachers and middle managers generally perceived work as *very* stressful and this view was shared by 66 per cent of middle managers. When we noted no gender differences at any point in this study significant differences in perceptions of work in general, well-being and aspects of work were apparent in relation to YCR. Middle managers in general reported a significantly greater decline in their normal levels of well-being than any other group. This was especially apparent in the case of middle managers with >10YCR but it should be noted that while 29 per cent of these middle managers reported a worrying change in their well-being this was also the case for 15 per cent of class teachers with >10YCR (GHQ-30 >20). These specific groups of teachers reported that they felt ‘much more tired than usual’; ‘under constant strain’ and ‘that everything was getting on top of them’. When we compared the precise circumstances of teachers with >10YCR it was clear that while middle managers perceived most aspects of work as significantly more stressful than any other group, there was some similarities

between how they and class teachers perceived both the content and context of work. In contrast no senior manager reported any aspect of the context of work as stressful. Notably, middle managers were the only group, who appeared to be concerned with “low staff morale” “balancing additional responsibilities”, and we would suggest the *consequences* of change (“not enough time for development work”) and a lack of time (“too much time working at home”; “ineffectiveness due to time constraints”). We argue here that as ‘change’ has fed into the multiple transactions that these middle managers with >10YCR specifically, engage with on a daily basis, this may have redefined the very nature of their *unique* professional contexts. For some it may be that such a scenario has created a state of dis-equilibrium and vulnerability (Fullan, 2001; Hargreaves, 2005). The role they hold at this moment in time has to be enacted within a very different context than previously experienced. It is therefore possible that, their perceptions of work are contingent on the extent to which they now feel their professional and personal resources are ‘fit for purpose’ or indeed match the demands of the their role (Kourmoussi, et al., 2015). We would imagine that years in current role would bring with it a level of successful adaptation to the demands of any role along with an increased capacity to manage change. However, if the landscape around us continues to shift from the familiar, how we *feel* within such a context, could increase our sense of vulnerability, while impacting on our efficacy as teacher and our well-being

Implications

What is it not yet known is whether the daily transactions of middle managers especially, with the content and context of work, set within a climate of *low staff morale* and *change* and a perceived lack of *time* will become a challenge too far and, in the longer term, impact on teacher well-being, quality retention and the educational experiences of those in their care. Our middle managers have provided an insight to their reality in terms of the demands of work and the apparent consequences of change and a perceived lack of time. We would strongly suggest that these teachers are in need of space if we wish to ensure that YCR does not become an antecedent of work stress and lead to significant declines in normal levels of

well-being. One solution would be to provide more time during the working week, for not just our middle managers but also for those class teachers, who will be managers of the future. This would enable them to reflect on the demands of their role within most recent context/s of change. Of course, this would incur a financial cost as any attempt to give teachers time to make sense of change and, actually breathe during the working week, could only be achieved if we employ more teachers (or shorten the ‘formal’ school day for pupils). Alternatively, we could learn from other countries and professions across the globe and build sabbaticals into our teachers’ learning journey, rather than having their personal development and professional learning simply as an ‘add-on’ to their busy working lives. It may be that to spread the cost we develop flexible sabbatical programmes and consider the timing of these in order that we can avoid teachers hitting the ten year wall, apparent within this study. We would imagine that years in current role would bring with it a level of successful adaptation to the demands of any role along with an increased capacity to manage change. However, if the landscape around us continues to shift from the familiar, how we *feel* within such context of change, could increase our sense of vulnerability, while impacting on our sense of efficacy and our well-being. We recognize the importance of having access to quality career long professional learning and the role that professional learning networks can play in this (Ipsos Mori Scotland, 2016), however it may be that we now need to re-consider the *nature of the space* in which professional learning takes place. The gift of time we argue for here, would provide teachers with the physical and emotional space to reflect and re-charge, but also in the long run, could impact positively on teacher well-being, their capacity to manage the content of work, and significantly, enhance the learning experiences and achievements of the young people they engage with across their teaching career. We would argue that to enable teachers to sustain their motivation and maintain their well-being over time and, with a view to achieving quality retention and high quality educational provision, this would be a small price to pay.

References

- Acker, G. M. 2004. "The effect of organizational conditions (role conflict, role ambiguity, opportunities for professional development and social support) on job satisfaction and intention to leave among social workers in mental health care." *Community Mental Health Journal*, 40 (1): 65-73.
- Admiraal, W.F., Korthagen, F.A.J., and Wubbels, T. 2000. "Effects of student teacher coping behaviours", *British Journal of Educational Psychology*, 70(1): 33-52.
- Bartholomew, K.J., Ntoumanis, N., Cuevos, R., and Lonsdale, C. 2014. "Job pressure and ill-health in physical education teachers: The mediating role of psychological need thwarting." *Teaching and Teacher Education*, 37: 101-107.
- Brown, M., & Ralph, S., and Brember, S. 2002. "Change linked work related stress in British Teachers". *Research in Education*, 67:1-12.
- Beltman, S., Mansfield, C., and Price, A (2011). Thriving not just surviving: a review of the literature on teacher resilience. *Educational Research Review*, 6, 185–207
- Boyle, J.G., Borg, M.G., Falzon, J. M., and Baglioni, S. 1995. "A structural model of the dimensions of teacher stress". *British Journal of Educational Psychology*, 65:49-67.
- Carton, A., and Fruchart, E. 2014. "Sources of stress, coping strategies, emotional experience: effects of the level of experience in primary school teachers in France". *Educational Review*, 66(2):245-262
- Chan, A. H. S., Chen, K., and Chong, E. Y. L. 2010. "Self-reported stress problems among teachers in Hong Kong". *AIP Conference Proceedings*, 1285: 420–434.
- Chaplin, R. P. 2008. "Stress and Psychological Distress among Trainee Secondary Teachers in England". *Educational Psychology*, 28(2):195-209
- Cousins, R., Mackay, J.S., Clark, S.D., Kelly, C., Kelly, P.J., and McCaig, R.H. 2004. "Management Standards' and work-related stress in the UK: Practical development". *Work & Stress*, 18(2):113-136.
- Cosgrove, J. 2000. *Breakdown: The facts about stress in teaching*, London: Routledge-Falmer.
- Day, C., and Kington, A. 2008. "Identity, well-being and effectiveness: the emotional contexts of teaching". *Pedagogy, Culture & Society*, 16, (1):7–23
- Day, C., Edwards, A., Griffith, A. & Qing, Gu. (2011). *Beyond Survival: Teachers and Resilience*. Nottingham: University of Nottingham
- Devos, C, Dupriez, V., and Paquay, L. 2012. "Does the social working environment predict beginning teachers' self-efficacy and feelings of depression". *Teaching and Teacher Education*, 28:206-217.
- Donaldson, G. 2011. "Teaching Scotland's Future". *A Report of a review of teacher education in Scotland*, Edinburgh, U.K.

- Dunlop, C.A., and Macdonald, E.B. 2004. *The Teachers Health and Well Being Study Scotland*, Healthy Working Lives Group, The University of Glasgow, commissioned by NHS Scotland and Teacher Support Scotland.
- Ferguson, K., Frost, L., and Hall, D. 2012. "Predicting Teacher Anxiety, Depression, and Job Satisfaction". *Journal of Teaching and Learning*, 8 (1):27-42.
- Field, A. 2005. *Discovering Statistics Using SPSS* (2nd Ed.), London: SAGE
- Flock, L., Goldberg, S. B., Pinger, L., Bonus, K., and Davidson, R. J. 2013. "Mindfulness for teachers: A pilot study to assess effects on stress, burnout and teaching efficacy". *Mind, Brain and Education : The Official Journal of the International Mind, Brain, and Education Society*, 7(3): 182–195.
- Fullan, M. 2002. *Change forces with a vengeance*. London, New York : Falmer.
- Gold, E., Smith, A., Hopper, I., Herne, D., Tansey, G., and Hulland, C. 2010. "Mindfulness-based stress reduction (MBSR) for primary school teachers". *Journal of Child and Family Studies*, 19(2):184–189.
- Gallant, A., and Riley, P. 2014. "Early career teacher attrition: new thoughts on an intractable problem". *Teacher Development*, 18(4):562–580.
- Goldberg, D.P. (1972). *The Detection of Psychiatric Illness by Questionnaire*. Monograph No 21, London: Oxford University Press.
- Griffith, J., Steptoe, A., and Cropley, M. 1999. "An investigation of coping strategies associated with job stress". *British Journal of Educational Psychology*, 69: 517-53
- Guglielmi, R.S., and Tatrow, K. 1998. "Occupational Stress, Burnout, and, Health in Teachers: A Methodological and Theoretical Analysis". *Review of Educational Research*, 68 (1):61-99.
- Gu, Q., and Day, C. 2007. "Teachers' resilience: a necessary condition for effectiveness". *Teaching and Teacher Education*, 23:1302-1316.
- Gyllensten, K. and Palmer, S. 2005. "The role of gender in workplace stress: A critical literature review". *Health Education Journal*. 64(3):271-288.
- Hall, J., Wilson, V., Sawyer, B., and Carroll, L. 2000. *Teachers' Workload Survey: A Survey conducted on behalf of the Educational Institute of Scotland*. Edinburgh: Scottish Council for Research in Education (SCRE).
- Hart, P.M., Wearing, A.J., Conn, M., Carter, N.L., and Dingle, R. 2000. "Development of the School Organisational Health Questionnaire: A measure for assessing teacher morale and school organisational climate". *British Journal of Educational Psychology*, 70(2): 211-228.
- Hargreaves, A. 2005. "Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change". *Teaching and Teacher Education*, 21:967–983

- Ho, J.T.S. 1996. "Stress, Health and Leisure Satisfaction: The Case of Teachers". *International Journal of Educational Management*, 10:41-48
- Hulme, M., Buamfield, V., Livingstone, K., and Menter, I. 2009. The Scottish Curriculum in Transition: Curriculum for Excellence, Paper presented at the British Educational Research Association Annual Conference, 2-5 September, 2009.
- Ipsos Mori, Scotland. 2016. Evaluation of Teaching Scotland's Future , Edinburgh, U.K
- Jarvis, M. 2003. "Can Social Representations Theory Explain Negative Responses from Teachers to CBT-Based Stress Management Training?: A Case Analysis". *Stress News*, 15(3): 1-7.
- Jennings, C., and Kennedy, J. 1996. *The reflective professional in Education*. London: Kingsley (Jessica).
- Johnstone, M., and Munn, P. 199). *Teachers Workload and Associated Stress*, Edinburgh: Scottish Council for Research in Education (SCRE).
- Jones, F., and Bright, J. 2001. *"Stress, myth, theory & research"*. Harlow, England: Pearson Education.
- Karatzias A, Power KG, Flemming J, Lennan F and Swanson V .2002. "The Role of Demographics, Personality Variables and School Stress on Predicting School Satisfaction/Dissatisfaction: Review of the literature and research findings". *Educational Psychology*, 22 (1): 33-50.
- Kerr, R. A. Breen, J., Delaney, M., Kelly, C and Miller, K. 2011."A Qualitative Study of Workplace Stress and Coping in Secondary Teachers in Ireland". *Irish Journal of Applied Social Studies*: 11(1):26-38.
- Kerr, R., McHugh, M., and McCrory, M. 2009. "HSE Management Standards and stress-related work outcomes". *Occupational Medicine*, 59(8):574-579.
- Kyriacou, C. 2001. "Teacher stress: Directions for future research". *Educational Review*, 53(1):27-35.
- Kourmoussi, N., Darviri, C., Varvogli, E., and Alexopoulos. E. C..2015. "Teacher Stress Inventory: validation of the Greek version and perceived stress levels among 3,447 educators". *Psychology Research and Behavior Management*, 8: 81-88.
- Lennon, F. 2003. *Organisation and Management in the Secondary School*. In T. G. K. Bryce & W. M. Humes (Eds.), *Scottish education: Second Edition Post-Devolution*. Edinburgh, UK: Edinburgh University Press.
- Lazarus, R. S. and Folkman (1984). *Stress, Appraisal and Coping*, New York: Springer
- MacKay C.J, .Cousins R, .Kelly P, J., Lee S, and McCaig . R, H. 2004."Management standards and work-related stress in the UK: policy background and science". *Work Stress*, 18:91-112.

- Mansfield, C.F., Beltman, S., Broadley, T., and Weatherby-Fell, N. 2016. "Building resilience in teacher education: An evidenced informed framework. *Teaching and Teacher Education*, 54: 77-87.
- Mark, G and Smith, A.P. 2011. "Effects of occupational stress, job characteristics, coping and attributional style on the mental health and job satisfaction of university employees", *Anxiety, Stress and Coping*, 25: 63-78.
- McCarthy, C. J., Lambert, R. G., and Reiser, J. 2014. "Vocational Concerns of Elementary Teachers: Stress, Job Satisfaction, and Occupational Commitment". *Journal of Employment Counselling*, 51(2):59–74.
- Millings-Monk, E., 2004. "Student mental health: the case studies". *Counselling Psychology Quarterly*, 17 (4): 395-412.
- Moffat, K, J., McConnachie, A., Ross S., and Morrison J.M .2004. "First year medical student stress and coping in a problem-based learning medical curriculum". *Medical Education* 38 (5):482–491.
- Montgomery, C. and Rupp, A. A. 2005. "*A Meta-analysis for exploring the diverse causes and effects of stress in teachers*". *Canadian Journal of Education*, 28(3):458-486.
- Mulholland. R. 2011. "Enabling the transition of NQTs-is reality so shocking after all". Paper presented at British Educational Research Conference, 6-8 September, Institute of Education, London, U.K.
- Mulholland, R., Mackinlay. A., and Sproule, J. 2013. "Teacher Interrupted: Work Stress, Strain, and Teaching Role". *SAGE Open*, 3(3):1–13.
- Munn, P., Johnstone, M., and Sharp, S. 2004. *Discipline in Scottish Schools: a comparative study over time of teachers' and head teachers' perceptions*, Final Report to SEED, September 2004, Edinburgh: Scottish Executive.
- Nixon, A.E., Mazzola, J.J., Bauera, J., Jeremy. Krueger, R., and . Spector, P.E. 2011. "Can work make you sick? A meta-analysis of the relationships between job stressors and physical symptoms". *Work & Stress*, 25 (1):1-22.
- O'Brien, J., and Christie, F. 2008. "A role for universities in the induction of Teachers?: A Scottish Case Study". *Journal of In-Service Education*, 34 (2): 147-163.
- Palmer, S., Cooper, C., and Thomas, K , 2004. "A model of work stress to underpin the Health and Safety Executive advice for tackling work-related stress and stress risk assessments". *Counselling at Work*, 1:1-5
- Pickard, W. 2003. *The history of Scottish education. 1980 to the present day*. In T. G. K. Bryce & W. M. Humes (Eds.), *Scottish education: Second Edition Post-Devolution*. Edinburgh, UK: Edinburgh University Press.
- Porter, S. (2014). *Job Satisfaction and Well-Being Survey*, Report commissioned by the Education Institute of Scotland, Edinburgh

- Priestley, M., and Humes, W. 2010. "The development of Scotland's Curriculum for Excellence: amnesia and déjà vu". *Oxford Review of Education*, 36(3):345-361.
- Priestley, M., Biesta, G. and Robinson, S. 2014. *Teacher agency: what is it and why does it matter?* Keynote Seminar at the 'Teachers Matter - But how?' Conference, Linnaeus University, 23 October 2014
- Quick, J.C., Quick, J.D., Nelson, D.L., and Hurrell, J.J, Jr. 1997. *Preventative stress management in organisations*. Washington, DC: American Psychological Association.
- Richards, J. 2012. "Teacher Stress and Coping Strategies: A National Snapshot". *The Educational Forum*, 76(3):299–316.
- Scottish Education Department.1987. "*Curriculum and Assessment: a Policy for the 90s*". Edinburgh, U.K.
- SEED. 2001. *A Teaching Profession for the 21st Century*, Edinburgh, Scottish Executive, January 2001.
- Scottish Government .2000. "*Standards in Scotland's Schools Act*", Edinburgh,U.K
- Skaalalvik, E.M., and Skaalvik, S. 2010. "Teacher self-efficacy and teacher burnout: A study of relations". *Teaching and Teacher Education*, 26:1059-1069
- Swann, J., and Brown, Sally. 1997. "The implementation of a national curriculum and teachers' classroom thinking", *Research Papers in Education*, 12 (1): 91-114
- Tabachnick, B. G., and Fidell, L. S. 2001. *Using Multivariate Statistics*. Boston: Allyn and Bacon.
- Teacher Assurance Report .2013. *Stress and Wellbeing Research*, 1(16), London: Teacher Assurance
- Travers, C. J., and Cooper, C.L. 1996.*Teachers Under Pressure: Stress In the Teaching Profession*, London, New York, Routledge.
- Thoits, P.A., 2010. "Stress and Health: Major Findings and Policy Implications".*Journal of Health and Social Behaviour*, 51 (5):541-553.
- Tolmie, A, Muijs, D and McAteer, E 2011, *Quantitative Methods in Educational and Social Research Using SPSS*. London, Open University Press.
- van Dick, R., and Wagner, U. 2001. "Stress and strain in teaching: A structural equation approach". *British Journal of Educational Psychology*, 71:243-259. .
- Wilson, V. 2002. *Feeling the strain: An overview of the literature on teachers' stress* (Research Report No 109). Edinburgh, UK: *The Scottish Council for Research in Education*.
- Wiley, C. 2000. "A synthesis of research on the causes, effects, and reduction strategies of teacher stress", *Journal of Instructional Psychology*, 27 (2): 80-87.

- Zach, S., and Inglis, V. 2013. "Physical Education Teachers and Their Attitudes Toward Change : Implementation of the New Horizon Educational Reform". *Journal of Teaching in Physical Education*, 32:355–374.
- Zurlo, M. C., Pes, D., and Siegrist, J. 2010. "Validity and Reliability of the Effort-Reward Imbalance Questionnaire in a sample of 673 Italian Teachers". *International Archives of Occupational and Environmental Health*, 83:665-674

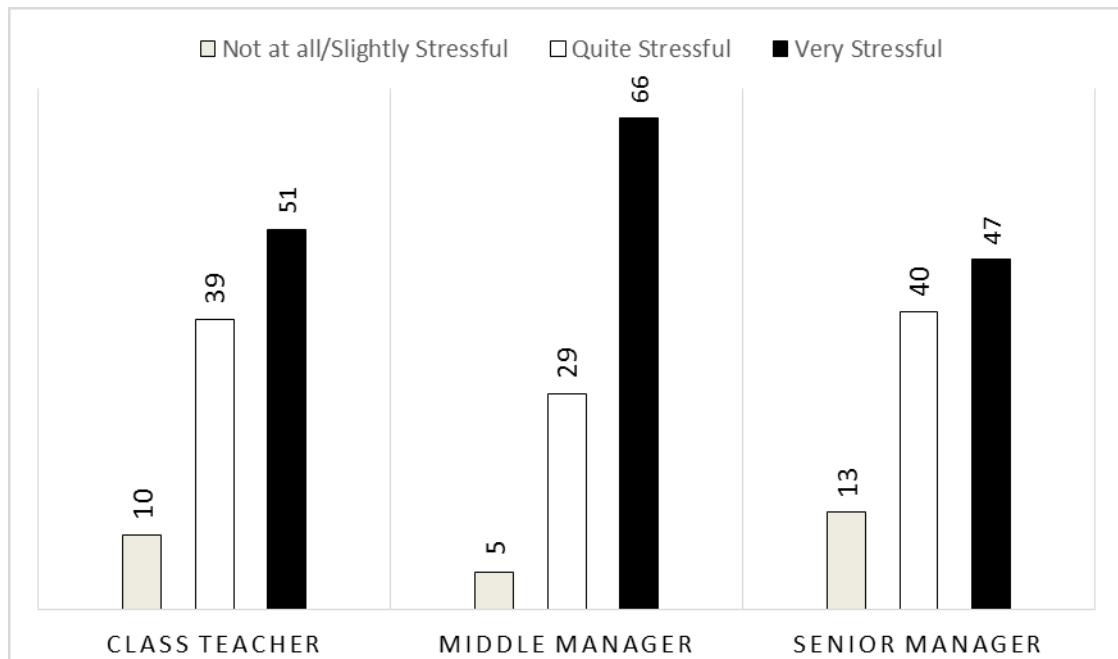


Figure 1. Proportion (%) of teachers according to teaching role who generally perceive work as ‘not at all/slightly’ (0/1) to ‘very’ (3) stressful.

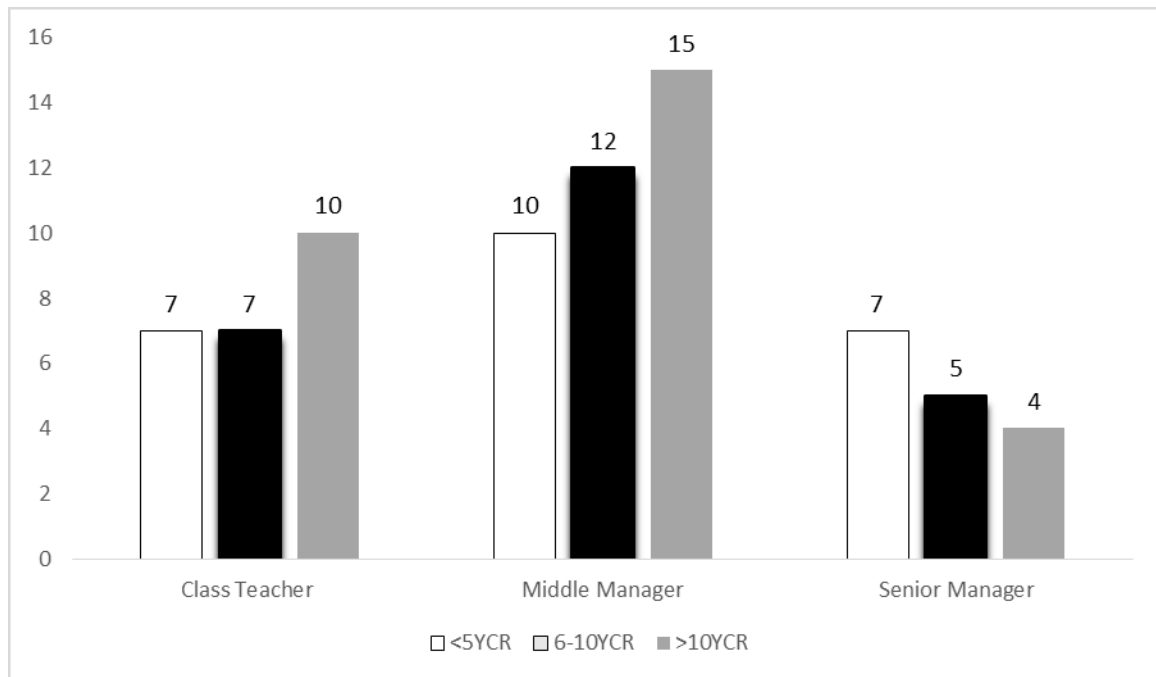


Figure 2 Mean GHQ-30 'case' scores recorded by each group of teachers according to years in current role (YCR).

Table 1. Frequency Distribution (f/ %) within groups formed by teaching role according to gender, age, years of teaching experience (YTE) and years in current role (YCR)

| | | Class Teacher (n-185) | | Middle Manager (n-175) | | Senior Manager (n -38) | |
|--------|--------|-----------------------|------|------------------------|------|------------------------|------|
| | | <i>f</i> | % | <i>f</i> | % | <i>f</i> | % |
| Age | <30 | 37 | 19.9 | 5 | 2.9 | 7 | 17.9 |
| | >40 | 120 | 65.0 | 145 | 82.8 | 28 | 74.4 |
| | | | | | | | |
| Gender | Male | 61 | 32.9 | 86 | 49.1 | 19 | 49.9 |
| | Female | 124 | 67.1 | 89 | 50.9 | 20 | 50.1 |
| | | | | | | | |
| YTE | <5 | 42 | 22.7 | 7 | 4.0 | 0 | 0.0 |
| | 5-15 | 49 | 26.5 | 26 | 14.9 | 4 | 10.5 |
| | >15 | 94 | 50.8 | 142 | 81.1 | 34 | 89.5 |
| | | | | | | | |
| YCR | 1-5 | 85 | 46.0 | 51 | 29.2 | 25 | 65.7 |
| | 6-10 | 43 | 23.2 | 41 | 23.4 | 6 | 15.8 |
| | >10 | 55 | 30.8 | 82 | 47.2 | 7 | 18.4 |
| | | | | | | | |

n -399

YTE= 'years of teaching experience'

YCR= 'years in current role'

Table 2. Mean (SD) SITS Factors scores for teachers holding different roles according to years in current role (YCR)

| | | | | Mean (SD) SITS Factors scores | | | |
|---------------------------------|-------|----------|------|-------------------------------|------------------------------|-----------------------------|---------------------------|
| Teaching Role | YCR | <i>f</i> | % | SITS F1:WL X=35.9 (14.5) | SITS F2: PE X=18.7 (10.1) | SITS F3:TLI X=24.3 (8.8) | SITS F4:PS X=10.1(5.7) |
| Class Teacher (<i>n</i> -185) | 1-5 | 87 | 47.0 | 28.9(13.8)* | 16.0(8.8)* | 20.6(7.6)* | 8.6(5.6)* |
| | 6-10 | 43 | 23.2 | 35.7(12.8) | 19.1(10.2) | 25.3(7.4) | 11.8(5.4) |
| | 11-16 | 55 | 29.8 | 37.9(13.5) | 21.1(10.0) | 27.2(9.4) | 12.4(5.1) |
| | | | | | | | |
| Middle Manager (<i>n</i> -175) | 1-5 | 51 | 29.2 | 40.0(12.2) | 19.8(9.3) | 24.5(12.5) | 10.5(5.9) |
| | 6-10 | 41 | 23.4 | 42.0(13.6) | 21.3(9.7) | 26.4(7.8) | 10.7(5.4) |
| | 11-16 | 32 | 47.2 | 44.1(10.7) | 22.2(10.4) | 27.5(6.5) | 11.7(5.1) |
| | | | | | | | |
| Senior Manager (<i>n</i> -38) | 1-5 | 25 | 65.7 | 24.3(12.4)* | 12.7(7.7)* | 19.6(13.4)* | 5.0(5.3)* |
| | 6-10 | 6 | 15.8 | 29.0(16.8)* | 13.3(4.2)* | 20.3(7.1)* | 5.6(5.3)* |
| | 11-16 | 7 | 18.4 | 22.8(12.20)* | 11.5(5.7)* | 15.0(8.8)* | 5.0(2.8)* |

n - 399 *= Scores lower than the group factor mean YCR = years in current role

WL= Workload; PE = Professional Ethos; TLI = Teaching Learning Interface; PS=Perceived Support

Table 3. Class Teachers, Middle Managers and Senior Managers with >10 YCR Perceptions' of Occupational Hazards Compared to the HSE Management Standards.

| Key Areas of Work Design | Included in these key areas of work design are: | Daily sources of stress (> 2, 3 = very stressful) | | |
|--------------------------|--|---|---|---|
| | | Class Teacher (n-55) | Middle Manager (n-73) | Senior Managers (n-7) |
| Demands | Issues such as workload, work patterns and the working environment | Workload Class Size Inclusive education | Workload Too much paperwork Inclusive Education <i>Balancing additional responsibilities with teaching</i> <i>Too much time spent working at home</i> | Workload Too much paperwork |
| Control | How much say the person has in the way they do their work | Indiscipline Erosion of Teachers' Authority Low level indiscipline | Indiscipline Erosion of teachers' authority Low level indiscipline | |
| Support | The encouragement and resources provided by the organisation , line management and colleagues | Too little time | Too little time <i>Not enough time for development work</i> <i>Ineffectiveness due to time constraints</i> | Too little time |
| Relationships at work | Promoting positive working practices to avoid conflict and dealing with unacceptable behaviour | Pupil motivation Underachieving pupils Pupils' manners | Pupil motivation Underachieving Pupils Pupils Manners <i>Low staff morale</i> | |
| Role | Whether people understand their role within the organisation and whether the organisation ensures the person does not have conflicting roles | 51 % had >15 YTE 85 % of their time per week spent actively 'teaching' | 81 % had >15 YTE 75 % of their time per week spent actively 'teaching' | 90 % had >15 YTE 0% of their time per week spent actively 'teaching' |
| Change | How organisational change is managed and communicated | Changing demands | Changing demands <i>Curriculum changes</i> <i>Overload of new ideas</i> | None |

Adapted from Kerr et al., 2009:57

